April 2010

MURPHY OIL
CR 466 & CR 103

OXFORD, FLORIDA

TRAFFIC IMPACT ANALYSIS

LTEC № 10-1001

MURPHY OIL
CR 466 & CR 103

OXFORD, FLORIDA

Traffic Impact Analysis

Prepared for:

Commercial Site Solutions, Inc.
1616 E. Bearss Ave.
Tampa, FL 33613

Prepared by:

Luke Transportation Engineering Consultants
P. O. Box 941556
Maitland, Florida 32794-1556

April 16, 2010

LTEC № 10-1001

PROFESSIONAL ENGINEERING CERTIFICATE

I hereby certify that I am a registered engineer in the State of Florida, practicing with Luke Transportation Engineering Consultants, Inc., a corporation authorized to operate as an engineering business (# EB-0007429), by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for:

PROJECT: Murphy Oil Gas Station

LOCATION: CR 466 & CR 103, Oxford, Florida

CLIENT: Commercial Site Solutions, Inc.

I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgement and experience.

NAME: J. Anthony Luke, P.E.

P.E. NO.: 42642

DATE: April 21, 2010

SIGNATURE: _____

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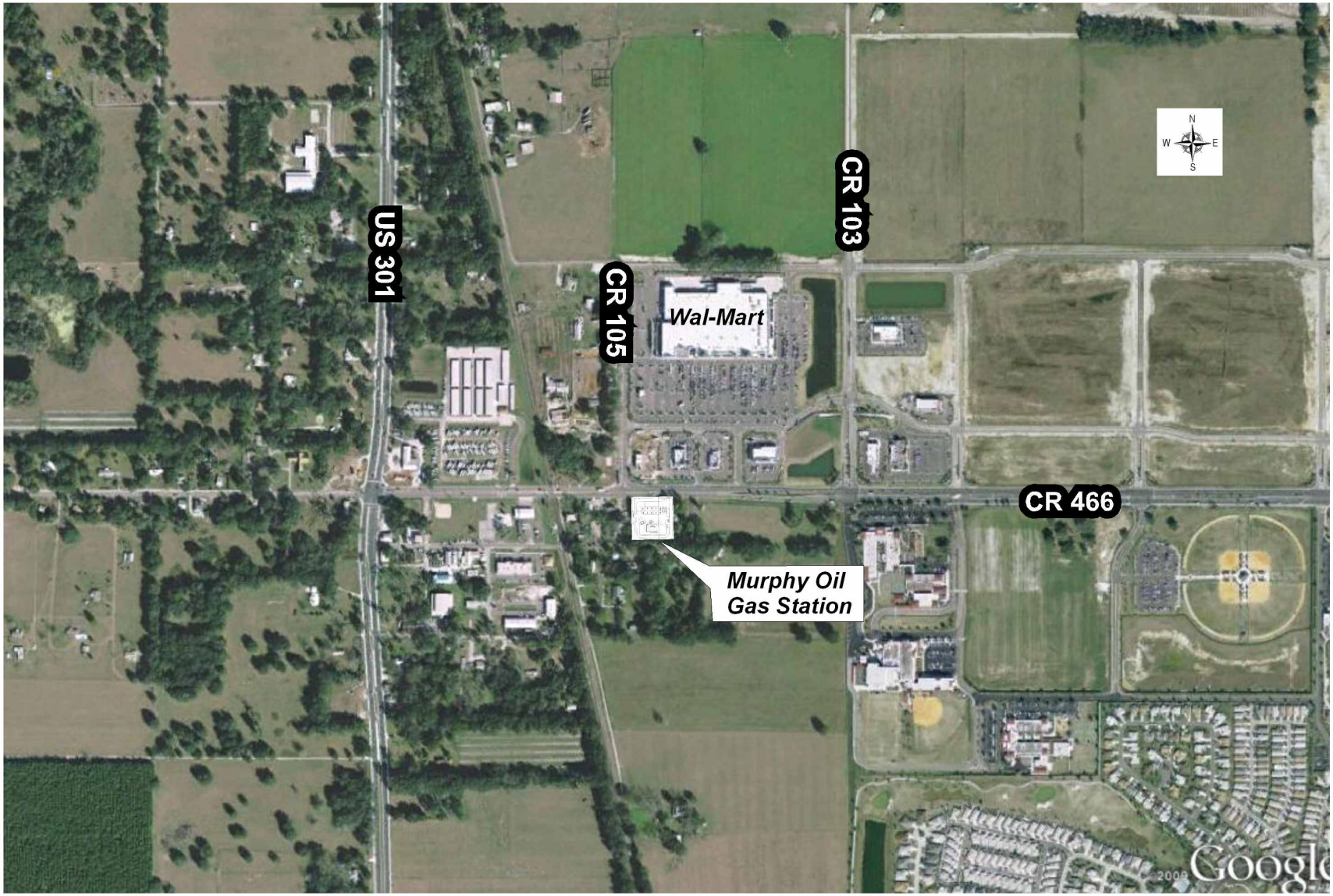
INTRODUCTION

The purpose of this study is to assess the traffic impacts of the proposed Murphy Oil gas station development to be located in the southeast quadrant of CR 466 and CR 103 in Oxford, Florida. This study has been performed in accordance with the Sumter County methodology for a traffic impact analysis and the Lake-Sumter MPO methodology for a traffic impact analysis. Data utilized in the study consisted of land use data provided by Project Planners, traffic volume data/level of service standards obtained from Sumter Count, Lake-Sumter MPO, the Florida DOT and LTEC. Programmed and planned roadway improvement information was taken from published Sumter County, Lake-Sumter County MPO and Florida DOT documents.

The development will consist of a 10-pump/20 fueling positions gasoline station with a 2,756 square foot convenience market and car wash. **Figure 1** depicts the location of the proposed development and the adjacent impact area.



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Project Site Location

Figure 1

EXISTING TRAFFIC CONDITIONS

The existing traffic operations in the vicinity of the project site were evaluated for the adjacent roadway. This area's major roadway was analyzed for the P.M. peak hour.

Major Roadway

Table 1 is a summary of traffic parameters for the study roadway segment to be impacted by the proposed development. All traffic data were taken from the December 4, 2009 Sumter County CMS Segment Report (see **Appendix A** for the CMS spreadsheet). This table lists the study roadway, number of lanes, functional classification, P.M. peak hour service volumes and adopted Level of Service (LOS) standard. **Table 1** is also a summary of the existing transportation conditions. This table shows the existing Daily and P.M. peak hour traffic volumes as well as the current P.M. peak hour LOS. As **Table 1** shows, the study roadway currently operates at an acceptable Level of Service.

Study Intersections

To determine the existing Level of Service provided by the intersection to be impacted by the proposed development, a capacity analysis was conducted utilizing the procedures of the ***2000 Highway Capacity Manual*** for unsignalized intersections. The analyses were conducted utilizing P.M. peak hour traffic volumes shown in **Figure 2** and existing intersection geometry (see existing turning movement count summary sheets in **Appendix B**).

TABLE 1

Study Roadway Parameters and Existing Level of Service

Roadway Segment	# Of Lanes	Roadway Class	Adopted LOS	Service Volumes (1) PM Peak Hour A	B	C	D	E	Daily (2)	PM Peak Hour Traffic Volumes (2) WB	EB	2-Way Total	LOS	Meets Adopted LOS
CR 644														
US 301 to CR 103	4LD	Minor Arterial	D	0	0	2,420	3,220	3,400	14,104	575	765	1,340	B	Yes

(1) Roadway service volumes from Sumter County CMS Segment Report - Version 12/04/2009

(2) Traffic volumes from Sumter County CMS Segment Report - Version 12/04/2009 and LTEC turning movement counts.

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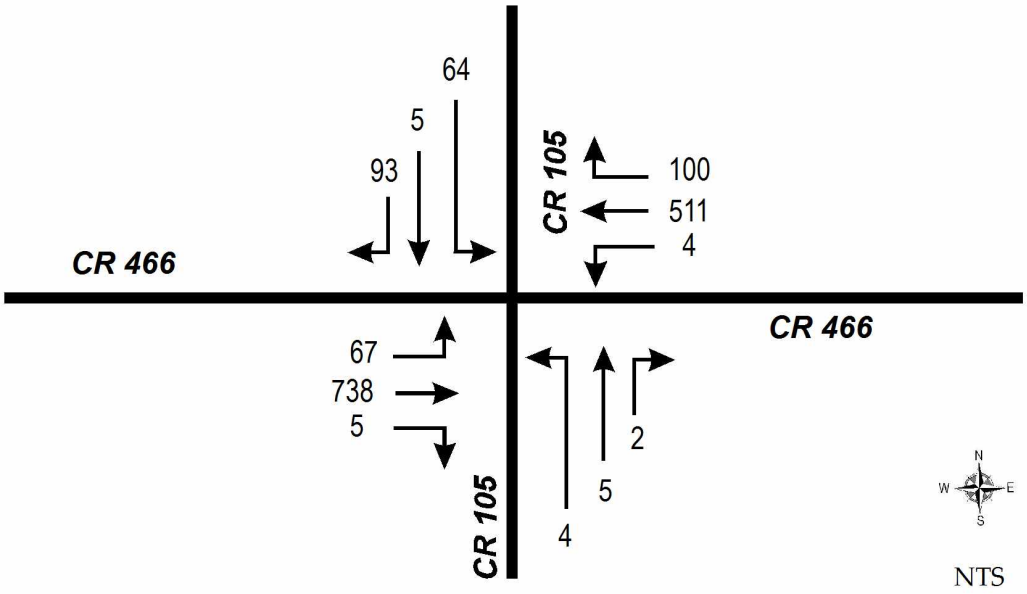
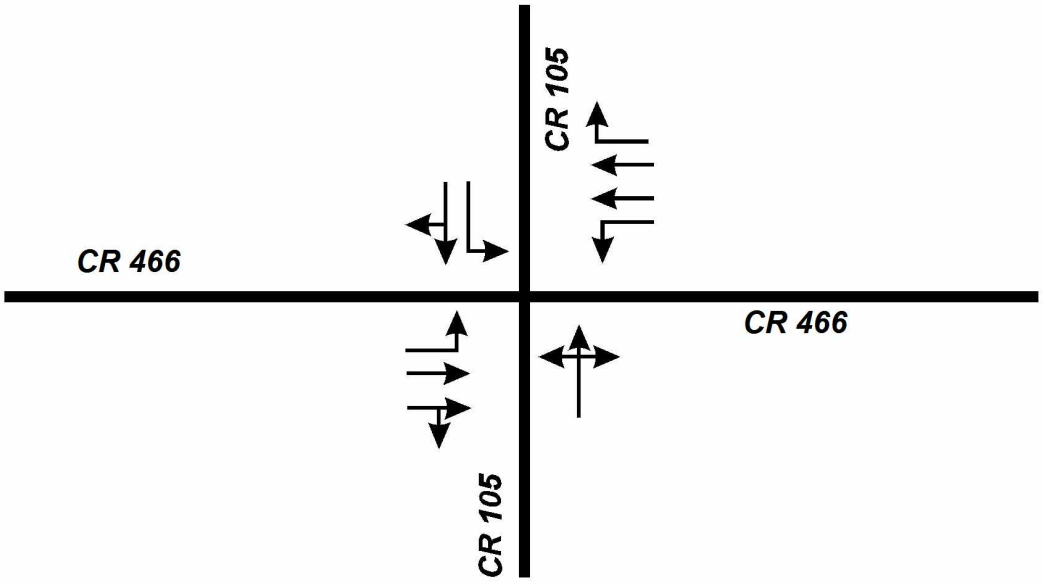


P.M. Peak Hour Traffic Volumes



Intersection Lane Configuration

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Existing P.M. Peak Hour Traffic Counts

Figure 2

The result of this analysis is included in computer printouts in **Appendix B** and is summarized below:

Intersection	Traffic Control	Delay	LOS
CR 466 & CR 105	STOP	9.2/9.3//27.8/14.4 [1]	A/A//D/B [1]

[1] EB/WB Major Street Left Turn Movement // NB/SB Minor Street Movements

As can be seen, the study intersection operates at a satisfactory level of service with short delays.

Programmed Improvements

No roadway improvements are currently programmed within the adjacent impact area.

PROPOSED DEVELOPMENT AND TRAFFIC GENERATION

As stated previously, The development will consist of a 10-pump/20 fueling positions gasoline station with a 2,756 square foot convenience market and car wash. **Figure 3** shows a conceptual site plan of the proposed development. The proposed development will be served by two access connections. One will be a full access connection onto CR 466 and the second will be a full access connection onto CR 105. To determine the impact of this development, an analysis of its trip generation characteristics was made. This included the determination of the project's trip generation and distribution/assignment of this trip generation to the area's roadways.

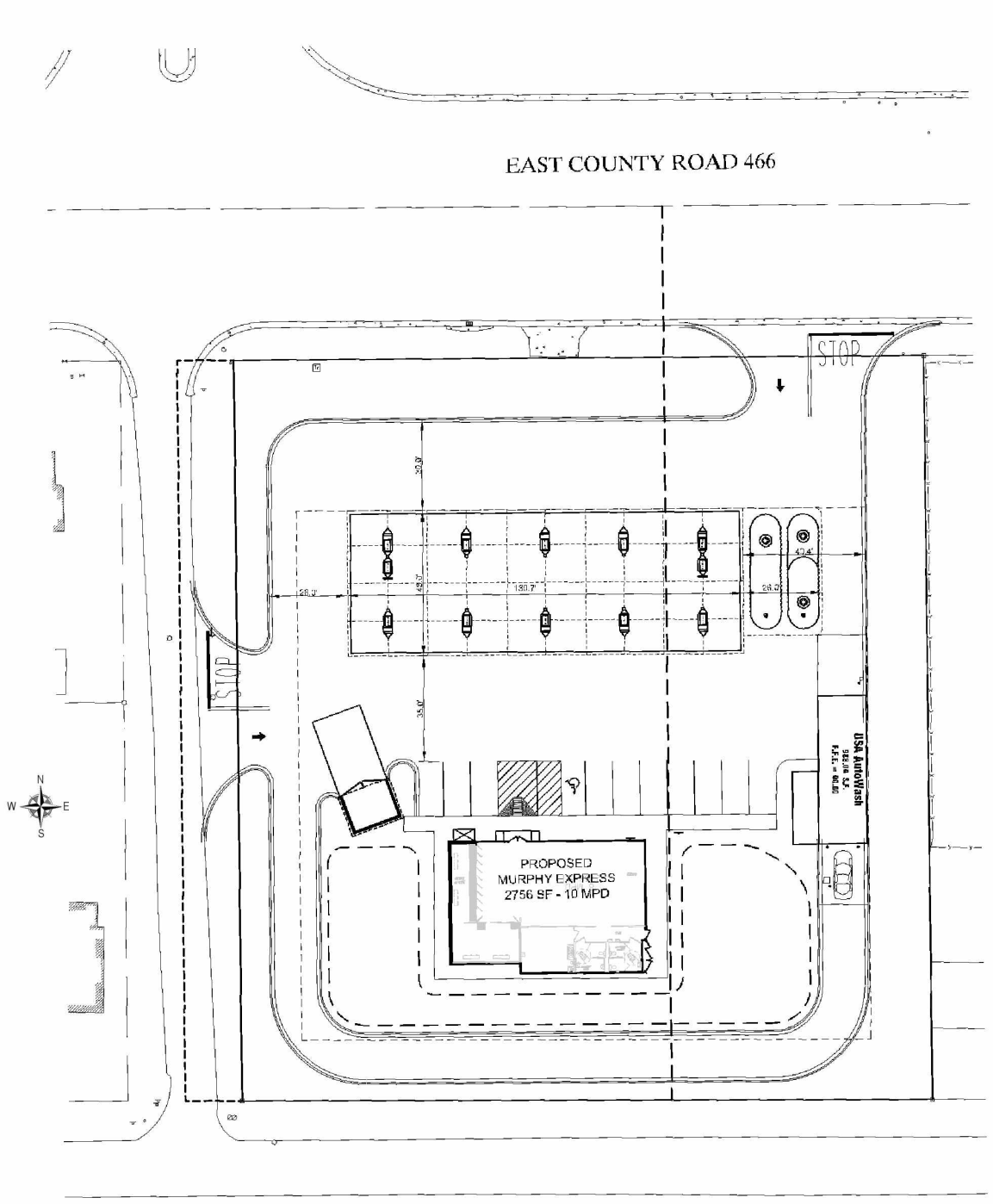
Trip Generation

The trip generation was calculated utilizing the ***8th Edition ITE Trip Generation Report, 2008*** data as summarized in **Table 2**. As can be seen, the development generates an estimated 3,057 daily vehicle trip ends, 239 A.M. peak hour vehicle trip ends and 279 P.M. peak hour vehicle trip ends.

Trips for the proposed land use consist of two trip types; primary trips and pass-by trips. In order to evaluate the true impact of the proposed development, primary trips were determined by subtracting the pass-by trips. This will be discussed below.

Pass-by Trips

The total driveway trips generated by the gasoline station development will comprise "new (primary)" and "pass-by" trips. Pass-by trips are defined as those trips from the passing roadway stream that would already be on the road. Therefore, pass-by traffic does not create additional impact on the surrounding roadways. For this site, the pass-by traffic will be drawn from CR 466. Based upon pass-by information contained in the ***2nd Edition ITE Trip Generation Handbook, June 2004,*** a gasoline station with convenience market will generate, on average 62% A.M. peak hour and 56% P.M. pass-by trips.



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Conceptual Site Plan

Figure 3

TABLE 2

Estimated Trip Generation (1)

Land Use	Size	ITE Code (2)	Trip Generation Rates							Total Trip Volumes						
			Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	A.M. Peak Hour			P.M. Peak Hour		
				Total	Enter	Exit	Total	Enter	Exit		Total	Enter	Exit	Total	Enter	Exit
Gasoline Pumps	20 VFP	946 / R	152.84	11.93	6.08	5.85	13.94	7.11	6.83	3,057	239	122	117	279	142	137
Land Use	Size	Pass-by Capture % (3)	Pass-by Capture Trips							Net New (Primary) Trips (4)						
		A.M.	P.M.	Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	A.M. Peak Hour			P.M. Peak Hour		
					Total	Enter	Exit	Total	Enter	Exit		Total	Enter	Exit	Total	Enter	Exit
Gasoline Pumps	20 VFP	62%	56%	1,712	149	76	73	157	80	77	1,345	90	46	44	122	62	60

(1) Trip Generation Rates from 8th Edition of ITE Trip Generation Report, 2008.

(2) R = Average Trip Rate

(3) P.M. Peak Hour Pass-by Percentage is based on ITE "Trip Generation Handbook," June 2004 Table 5.29 Land Use 945

(4) Total Traffic Volumes minus Pass-by Trips = Net New (Primary) Trips.

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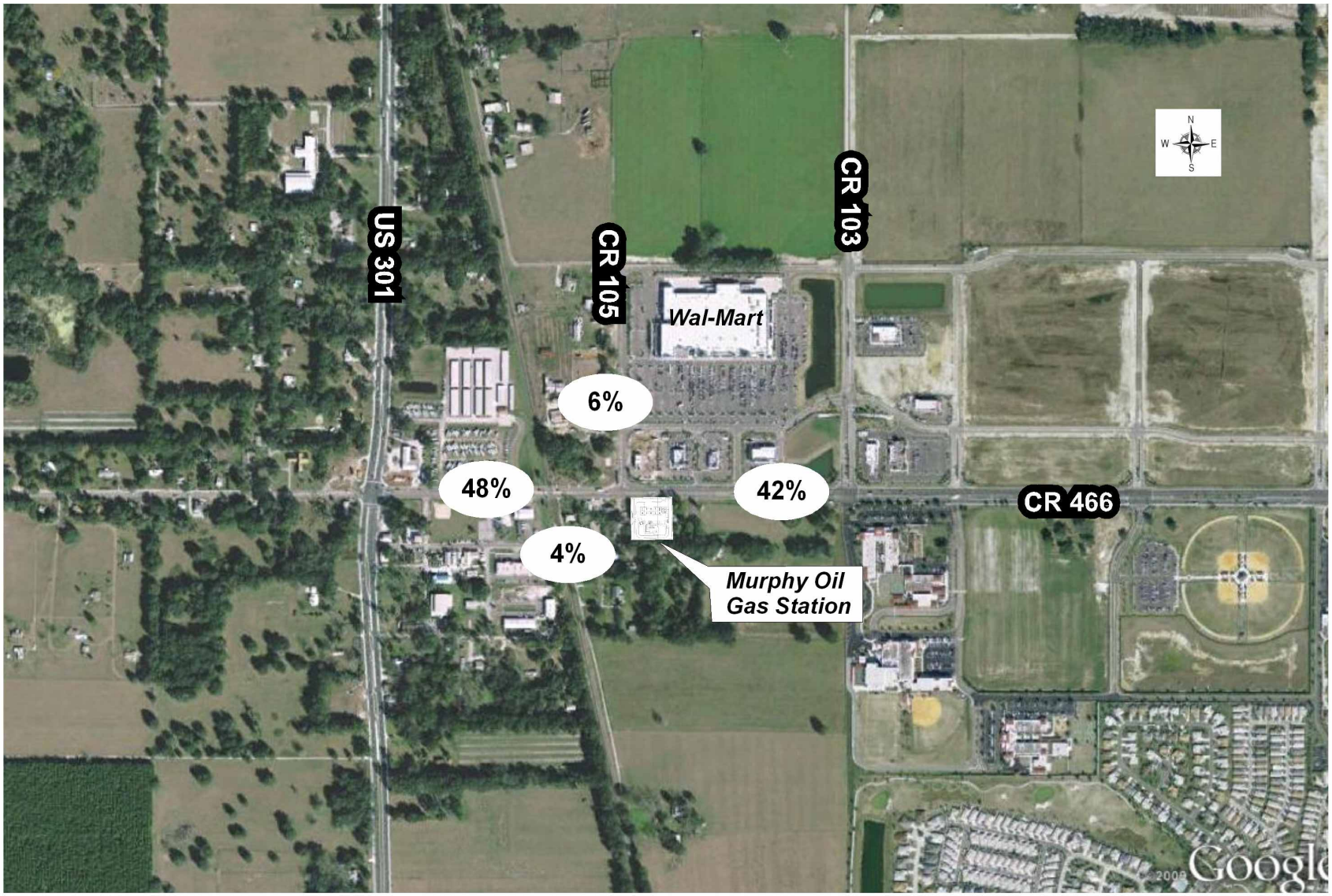
Pass-by Trips

Applying these factors results in 149 A.M. peak hour and 157 P.M. peak hour pass-by trip ends. However, the Florida DOT ***Site Impact Handbook*** stipulates that pass-by trips should not be higher than 10% of the adjacent streets traffic volume. The ITE calculated pass-by trips are 9.9% (A.M.) and 10.4% (P.M.) of the 2011 traffic on CR 466 (see calculation below). Therefore, the pass-by trip calculation will be based on ITE calculated pass-by percentages for the A.M. peak period and limited to 10% of the adjacent street traffic for the P.M. peak hour. **Table 2** also shows the resulting net new (Primary) trip volumes.

Background Traffic (CR 466)	1,507
10% Threshold	151
Pass-by Traffic	149 (A.M.) / 157 (P.M.)
Is Pass-by < 10% of Adjacent Street Traffic?	No A.M., Yes P.M. 149 or 157 ÷ 1,507 = 9.9% or 10.4%

Trip Distribution/Assignment

The distribution and assignment of project trips were based upon a review of the existing travel patterns observed during the data collection and field review. The resulting land use travel pattern distribution defined the directional pattern of vehicle trips to and from the site and is shown graphically in **Figure 4**. This traffic distribution pattern, was subsequently used to distribute and assign the generated traffic for the proposed development to the area roadways.



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Project Trip Distribution

Figure 4

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PROJECTED TRAFFIC CONDITIONS

Projected traffic conditions on the study roadways were determined for a concurrency analysis. This was accomplished by combining project traffic with background traffic. **Table 3** shows the projected background traffic volumes calculation. Background traffic for 2011 was based on the Sumter County CMS committed traffic volumes. **Table 3** contains the background traffic bidirectional calculation as well as the two-way total for the study roadway segment.

Analysis of Projected Traffic Conditions

Table 4 is an analysis of traffic conditions for the study roadways by segment. This table shows both the Project trip distribution and Project trips for the study segments. As can be seen, **Table 4** shows the total P.M. peak hour trips (background trips plus Project trips), and the resultant Level of Service by roadway segment. As can be seen, the study roadway continues to operate at acceptable levels of service.

To analyze the projected intersection impacts, the study intersections were analyzed using the procedures of the ***2000 Highway Capacity Manual.*** Background through traffic was determined by projecting existing traffic to year 2011 via a background roadway growth factor of 12.5%. This analysis used projected traffic volumes (see **Figure 5**) and existing geometric/proposed conditions. Printouts of the intersection analyses may be found in **Appendix C**. The projected Levels of Service and delay for the study intersections are shown in **Table 5**.

TABLE 3

2011 Background Traffic

Roadway Segmen	Existing Traffic Volumes (1)		Existing 2-Way Total	Background Growth Volumes (2)		Background 2-Way Total	Background Traffic Volumes		Background 2-Way Total
CR 644	WB	EB		WB	EB		WB	EB	
US 301 to CR 103	575	765	1,340	72	95	167	647	860	1,507

(1) From Table 1

(2) Committed traffic from Sumter County CMS Segment Report - Version 12/04/2009.

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TABLE 4

2011 Study Roadway Parameters

Roadway Segmen	# Of Lanes	Roadway Class	Adopted LOS	Adopted Capacity	P.M. Peak Hour Background Volumes	Project Trip Distribution	Project Volumes	Total Volumes	LOS	% Sig
CR 644										
US 301 to CR 105	4LD	Arterial	D	3,220	1,507	48.0%	62	1,569	C	1.93%
CR 105 to CR 103	4LD	Arterial	D	3,220	1,507	42.0%	54	1,561	C	1.68%

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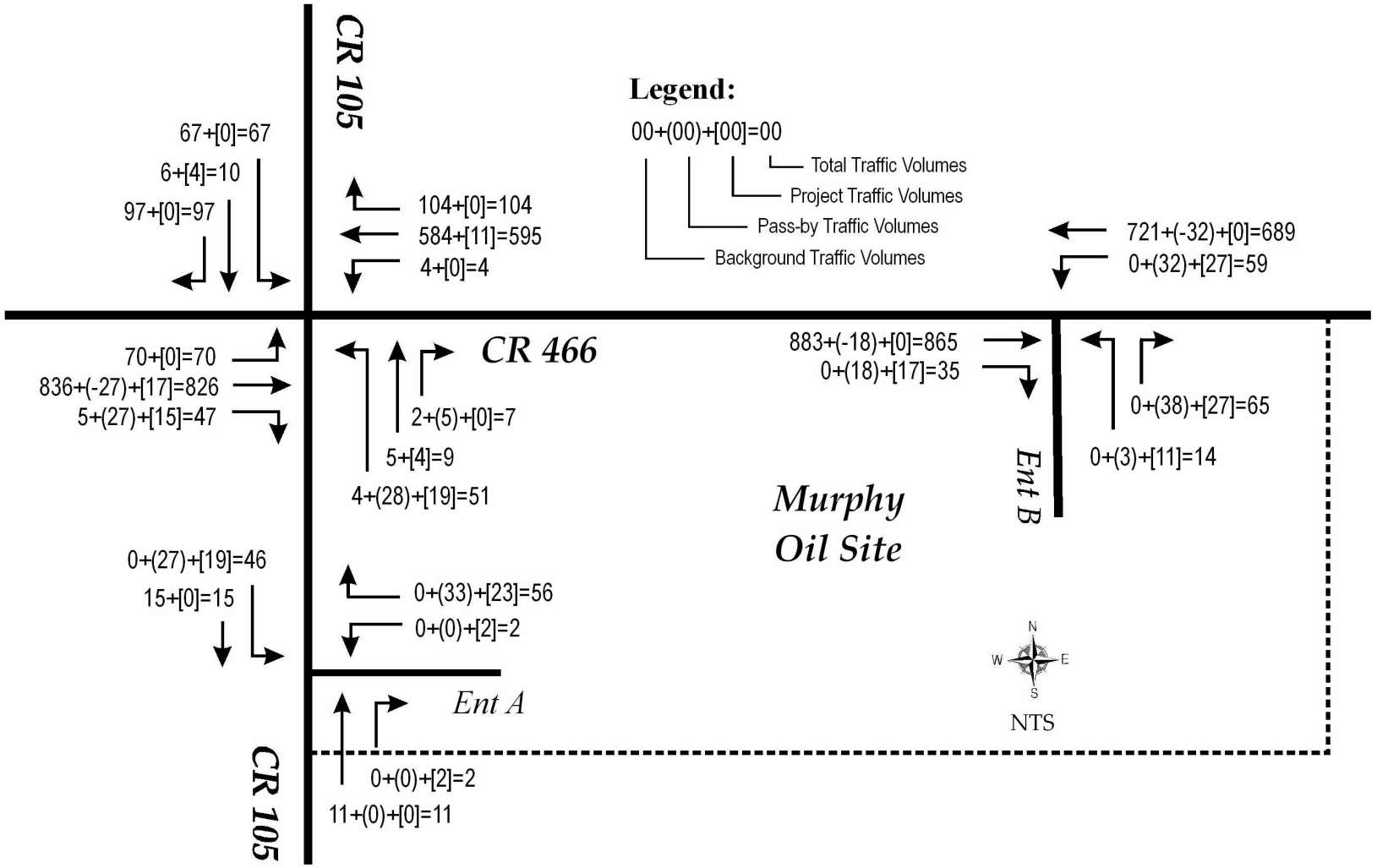

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Projected 2011
P.M. Peak Hour Traffic Volumes

Figure 5

Table 5
Projected Intersection Level of Service

Intersection	Traffic Control	Delay	LOS
CR 466 & CR 105	STOP	9.5/9.9 //30.4/18.3 [1]	A/A // D/C [1]
CR 105 & Entrance A	STOP	10.5//13.3 [2]	B//B [2]
CR 466 & Entrance B	STOP	7.3 //8.6 [3]	A//A [3]

[1] EB/WB Major Street Left Turn Movement // NB/SB Minor Street Movements
[2] WB Major Street Left Turn Movement // NB Minor Street Movements
[3] SB Major Street Left-Through Turn Movements // WB Minor Street Movements

As can be seen, all of the study intersections will operate at satisfactory Levels of Service with short delays.

Project Access

The proposed development will be served by two (2) access connections, one on CR 466 and one on CR 105. Both will be full access connections.

STUDY CONCLUSIONS

The purpose of this study is to assess the traffic impacts of the Murphy Oil gas station with convenience market development to be located in the southeast quadrant of CR 466 and CR 105 in Oxford, Sumter County.

- The development will consist of a 10-pump/20 vehicle fueling position gasoline station with 2,576 square foot convenience market and car wash. . At build-out, the development will generate a net new (Primary) daily traffic volume of 1,402 trip ends, 90 A.M. peak hour net new (Primary) trip ends and a P.M. peak hour volume of 128 net new (Primary) trip ends.

- The adjacent roadway segment to be impacted by the proposed development currently has sufficient available capacity and will continue to have available capacity to serve the traffic generation of the proposed development.

- The unsignalized study intersection of CR 466 and CR 105 currently operates at an acceptable level of service and is projected to operate at an acceptable level of service at build-out of the proposed development.

- The two proposed unsignalized access driveway connection intersections are also projected to operate at acceptable levels of service at build-out of the proposed development. The access driveways should be designed to Florida DOT and Sumter County design standards.

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APPENDIX

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APPENDIX A

CMS Spreadsheet

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Table 1

Sumter County Concurrency Management System

Tier I Test: To Determine Concurrency or Need for Additional Analysis

Version: 12/04/2009, Valid February 2010 - February 2011, unless superseded

Sorted ascending by Facility ID and On Street

Notes:
1) In the Lanes/Type columns, "0" indicates that the segment does not exist in existing or future years.
2) Refer to the Technical Support Appendix for 2010, 2013 and 2015 LOS Reports for detailed Level of Service information.

(1) Manually enter the **new external project traffic** associated with your development. New trips should be reported as peak hour two-way volumes.
New Project Traffic = Total Trips Generated Pass-By + Internal Capture

(2) Manually enter the **total external project traffic** associated with your development. New trips and project traffic should be reported as peak hour two-way volumes.
Total Project Traffic = Total Trips Generated Internal Capture

(3) Review the status columns to **verify the level of study that will need to be performed.**
1) If the LOS Method is Generalized Tables (Column X) but the "Status" columns indicate "Study 2" then an ARTPLAN analysis will need to be done at a minimum.
2) If the LOS Method is "Conceptual (ARTPLAN)" and "Status" columns indicate "Study 1" an (updated) ARTPLAN analysis will need to be done.
3) If the "Status" columns indicate "Data 1," then data collection is required.

Applicant will enter the % Distribution for each segment which will further document how the New External Project Traffic (Column W1) and Total External Project Traffic

General Information							Lanes/Type					Growth			AADT (Daily Volumes)			
Segment ID	Facility ID (2010)	Facility ID (2013)	Facility ID (2015)	On Street	From Street	To Street	Existing Number of Lanes and Type	Programmed Improvements	Hurricane Evacuation Route	Strategic Intermodal System	De Minimis Status (2013)	Base Year Volume	Base Year of Count	Annual Growth Rate	AADT (2010)	AADT (2013)	AADT (2015)	K Factor
A	B1	B2	B3	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R
5000620	1	1	1	AVENIDA CENTRAL	RIO GRANDE AVE	EL CAMINO REAL	2U		N	N				2.00%	0	0	0	0.095
5000610	1	1	1	AVENIDA CENTRAL	RIO GRANDE AVE	US 27/US 441/SR 500	2U		N	N				2.00%	0	0	0	0.095
5000600	1	1	1	AVENIDA CENTRAL	EL CAMINO REAL	US 27/US 441/SR 500	2U		N	N				2.00%	0	0	0	0.095
6000025	2	2	2	BAILEY TRAIL	BUENA VISTA BLVD (N)	BUENA VISTA BLVD (S)	2U		N	N		6,041	2009	2.00%	3,424	3,634	3,781	0.095
6000030	3	3	3	BELVEDERE BLVD	C-466E	CHURCHILL DOWNS	2D		N	N		8,501	2009	2.00%	8,671	9,202	9,574	0.095
6000035	3	3	3	BELVEDERE BLVD	CHURCHILL DOWNS	LYNNHAVEN LN	2U		N	N		8,176	2009	2.00%	8,505	9,025	9,390	0.095
6000040	3	3	3	BELVEDERE BLVD	LYNNHAVEN LN	BUENA VISTA BLVD	2U		N	N		8,176	2009	2.00%	8,340	8,850	9,208	0.095
6000050	4	4	4	BONITA BLVD	BUENA VISTA BLVD	CANAL ST	2U		N	N		2,519	2009	4.00%	2,620	2,947	3,187	0.095
6000045	4	4	4	BONITA BLVD	CANAL ST	MORSE BLVD N	2U		N	N		2,745	2009	4.00%	2,855	3,211	3,473	0.095
6000015	5	5	5	BUENA VISTA BLVD	SR 44	C-44A	0	4D	N	N				4.00%	0	0	0	0.095
6000010	6	6	6	BUENA VISTA BLVD	C-44A	C-466A	0	4D	N	N				4.00%	0	0	0	0.095
6000005.1	7	7	7	BUENA VISTA BLVD	C-466A	ODELL CIRCLE S. END	4D		N	N		5,677	2009	4.00%	5,904	6,641	7,183	0.095
6000005.3	7	7	7	BUENA VISTA BLVD	ODELL CIRCLE S. END	BONITA BLVD	4D		N	N		3,891	2009	4.00%	4,047	4,552	4,923	0.095
6000005.2	7	7	7	BUENA VISTA BLVD	BONITA BLVD	ODELL CIRCLE N. END	4D		N	N		12,026	2009	4.00%	7,736	8,701	9,411	0.095
6000005.4	7	7	7	BUENA VISTA BLVD	ODELL CIRCLE N. END	STILLWATER TRAIL	4D		N	N		12,026	2009	4.00%	12,507	14,069	15,217	0.095
6000005.6	7	7	7	BUENA VISTA BLVD	STILLWATER TRAIL	C-472	4D		N	N		12,213	2009	4.00%	14,594	16,417	17,756	0.095
3300000.1	8	8	8	BUENA VISTA BLVD	C-472	BELVEDERE BLVD	4D		N	N		14,533	2009	4.00%	15,114	17,002	18,389	0.095
3300000.2	8	8	8	BUENA VISTA BLVD	BELVEDERE BLVD	C-466	4D		N	N		16,418	2009	2.00%	15,840	16,809	17,488	0.095
5000010.1	9	9	9	BUENA VISTA BLVD	C-466	SADDLEBROOK LN	4D		N	N		15,521	2009	2.00%	15,831	16,800	17,479	0.096
5000010.2	9	9	9	BUENA VISTA BLVD	SADDLEBROOK LN	EL CAMINO REAL	4D		N	N		15,521	2009	2.00%	15,831	16,800	17,479	0.096
5000000	9	9	9	BUENA VISTA BLVD	EL CAMINO REAL	MARION COUNTY BOUNDARY	4D		N	N		15,191	2009	2.00%	15,495	16,443	17,108	0.096
5000110	10	10	10	BUENOS AIRES BLVD	EL CAMINO REAL	US 27/US 441/SR 500	2U		N	N				2.00%	0	0	0	0.095
3528100	11	11	11	C-44A	SR 44 (W)	CR 221	2U		N	N		893	2009	2.00%	911	967	1,006	0.096
3528110.1	11	11	11	C-44A	CR 221	CR 213	2U		N	N		893	2009	2.00%	911	967	1,006	0.096
3528110.2	12	12	12	C-44A	CR 213	US 301/SR 35	2U		N	N		893	2009	2.00%	911	967	1,006	0.096
3528120	13	13	13	C-44A	US 301/SR 35	CR 139	2U		N	N		2,750	2009	2.00%	2,805	2,977	3,097	0.096
3528130.1	14	14	14	C-44A	CR 139	BUENA VISTA BLVD	2U		N	N		2,976	2009	2.00%	3,036	3,221	3,351	0.096
3528130.2	14	14	14	C-44A	BUENA VISTA BLVD	SR 44 (E)	2U		N	N		2,976	2009	2.00%	3,036	3,221	3,351	0.096
3542100	15	15	15	C-462	C-475	CR 229	2U		N	N		602	2009	5.82%	637	755	845	0.097
3542120	16	16	16	C-462	CR 229	CR 223	2U		N	N		2,267	2009	3.25%	2,341	2,576	2,747	0.096
3542130	16	16	16	C-462	CR 223	CR 221	2U		N	N		2,267	2009	3.25%	2,341	2,576	2,747	0.096
3542140	16	16	16	C-462	CR 221	CR 209	2U		N	N		2,267	2009	3.25%	2,341	2,576	2,747	0.096
3542150	17	17	17	C-462	CR 209	US 301/SR 35	2U		N	N		2,574	2009	2.00%	2,625	2,786	2,899	0.096
3541110	18	18	18	C-462	US 301/SR 35	CR 121	2U		N	N		4,821	2009	2.00%	4,917	5,218	5,429	0.096
3541100	18	18	18	C-462	CR 121	C-466A	2U		N	N		4,567	2009	2.00%	4,384	4,652	4,840	0.096
3537100	19	19	19	C-466	C-475	CR 237	2U		N	N		4,263	2009	2.12%	4,353	4,636	4,835	0.097
3537105	19	19	19	C-466	CR 237	CR 229	2U		N	N		4,263	2009	3.00%	4,782	5,226	5,544	0.097
3537110	19	19	19	C-466	CR 229	CR 227	2U		N	N		5,023	2009	4.45%	5,247	5,979	6,522	0.097
3537115	19	19	19	C-466	CR 227	CR 223	2U		N	N		5,023	2009	4.04%	5,226	5,885	6,370	0.097
3537200	20	20	20	C-466	CR 223	CR 209	2U		N	N		5,980	2009	4.53%	6,251	7,139	7,801	0.096
3537130	21	21	21	C-466	CR 209	US 301/SR 35	2U		N	N		5,980	2009	4.53%	6,251	7,139	7,801	0.096
3537140	22	22	22	C-466	US 301/SR 35	CR 103	4D		N	N		11,787	2004	4.00%	14,104	15,866	17,160	0.095
3537150	22	22	22	C-466	CR 103	CR 101	4D		N	N		10,981	2003	4.00%	15,593	17,540	18,971	0.095
3537180	22	22	22	C-466	CR 101	TALL TREES LN	4D		N	N		24,650	2009	3.63%	25,545	28,429	30,530	0.095
3537190	22	22	22	C-466	TALL TREES LN	BUENA VISTA BLVD	4D		N	N		24,650	2009	3.63%	25,545	28,429	30,530	0.095
3537160.1	23	23	23	C-466	BUENA VISTA BLVD	MARIPOSA WAY	4D		N	N		13,086	2003	4.95%	17,425	20,143	22,186	0.095
3537160.2	23	23	23	C-466	MARIPOSA WAY	MORSE BLVD	4D		N	N		13,086	2003	5.54%	16,853	19,812	22,067	0.095
3537170	23	23	23	C-466	MORSE BLVD	NE 90TH ST	4D		N	N		18,850	2009	1.82%	17,209	18,166	18,833	0.095
3533100	24	24	24	C-466A	US 301/SR 35	C-462	2U		N	N		7,465	2009	2.00%	7,614	8,080	8,407	0.096
3533110.1	25	25	25	C-466A	C-462	BUENA VISTA BLVD	2U	4D	N	N		7,465	2009	2.00%	7,476	7,933	8,254	0.096
3533110.2	26	26	26	C-466A	BUENA VISTA BLVD	CANAL ST	4D		N	N		7,193	2009	1.00%	7,265	7,485	7,636	0.096
3533110.5	26	26	26	C-466A	CANAL ST	MORSE BLVD	4D		N	N		7,081	2009	1.00%	7,152	7,369	7,517	0.096
3533110.4	26	26	26	C-466A	MORSE BLVD	LAKE COUNTY BOUNDARY	4D		N	N		8,864	2009	2.00%	9,041	9,595	9,982	0.096
3557110	27	27	27	C-468	US 301/SR 35	CR 513	2U		N	N		2,861	2009	2.00%	2,918	3,097	3,222	0.096
3557120	27	27	27	C-468	CR 513	CR 507	2U		N	N		2,861	2009	2.00%	2,918	3,097	3,222	0.096
3557130.2	27	27	27	C-468	CR 507	CR 501	2U		N	N		2,461	2009	2.00%	2,510	2,664	2,771	0.096
3557130.3	27	27	27	C-468	CR 501	SR 91/FLORIDAS TURNPIKE	2U		N	N		2,872	2009	2.00%	2,929	3,109	3,234	0.096
3557140	28	28	28	C-468	SR 91/FLORIDAS TURNPIKE	SR 44	2U		N	N		3,650	2009	2.00%	3,723	3,951	4,110	0.097
3553150	29	29	29	C-469	SR 50	CR 728	2U		N	N		1,960	2009	2.00%	1,999	2,122	2,207	0.097
3553140	30	30	30	C-469	CR 728	CR 716	2U		N	N		1,960	2009	2.00%	1,999	2,122	2,207	0.097
3553110	30	30	30	C-469	CR 716	C-48 E	2U		N	N		1,960	2009	2.00%	1,999	2,122	2,207	0.097
3550120	31	31	31	C-470 E	SR 93/I-75	C-475	2U		N	N		5,826	2009	2.00%	7,034	7,464	7,766	0.097
3550110	31	31	31	C-470 E	C-475	US 301/SR 35	2U		N	N		5,826	2009	2.00%	5,943	6,306	6,561	0.097
3527000.1	32	32	32	C-470 E	US 301/SR 35	CR 501	2U		N	N		6,422	2009	2.00%	5,648	5,993	6,236	0.096
3527000.2	33	33	33	C-470 E	CR 501	LAKE COUNTY BOUNDARY	2U		N	N		6,422	2009	2.00%	5,809	6,164	6,413	0.097
3526000	34	34	34	C-470 N	SR 44	CR 412	2U		N	N		5,358	2009	4.86%	4,662	5,375	5,911	0.097
3530000	34	34	34	C-470 N	CR 412	CR 416 N	2U		N	N		5,358	2009	4.83%	5,617	6,471	7,111	0.097
3550100	35	35	35	C-470 N	CR 416 N	SR 93/I-75	2U		N	N		7,219	2009	2.00%	7,526	7,986	8,309	0.097
3543100	36	36	36	C-472	US 301/SR 35	CR 117	2U		N	N		2,714	2009	2.78%	2,789	3,029	3,199	0.096
3543110.1	37	37	37	C-472	CR 117	LYNN HAVEN LANE	2U		N	N		3,831	2009	8.39%	4,152	5,288	6,212	0.096
3543110.2	37	37	37	C-472	LYNN HAVEN LANE	BUENA VISTA BLVD	2U		N	N		3,831	2009	1.52%	3,892	4,072	4,197	0.096
3531000.1	38	38	38	C-475	SR 48 W	CR 542	4U		N	N		10,141	2009	2.00%	10,344	10,977	11,420	0.098
3531000.2	39	39	39	C-475	CR 542	C-470 E	2U		N	N		3,627	2009	2.00%	4,253	4,514	4,696	0.098
3525100	40	40	40	C-475 N	SR 44	C-462	2U		N	N		2,094	2009	2.18%	2,140	2,283	2,383	0.098
3525110	40	40	40	C-475 N	C-462	CR 245	2U		N	N		2,094	2009	2.18%	2,140	2,283	2,383	0.098
3536100	40	40	40	C-475 N	CR 245	C-466	2U		N	N		2,412	2009	3.71%	2,501	2,790	3,001	0.098
3537120	41	41	41	C-475 N	C-466	MARION COUNTY BOUNDARY	2U		N	N		4,216	2009	4.76%	4,417	5,078	5,573	0.097
3540100	42	42	42	C-476 E	US 301/SR 35	JASPER ST	2U		N	N		1,436	2009	2.00%	1,465	1,554	1,617	0.097
3540110	42	42	42	C-476 E	JASPER ST	SR 471	2U		N	N		1,436	2009	2.00%	1,465	1,554	1,617	0.097
3549100	43	43	43	C-476 W	HERNANDO COUNTY BOUND/	C-575	2U		Y	N		3,063	2009	2.00%	3,124	3,315	3,449	0.098
3549110	43	43	43	C-476 W	C-575	C-476B	2U		Y	N		3,321	2009	2.00%	3,387	3,595	3,740	0.098
3549120	44	44	44	C-476 W	C-476B	CR 625	2U		Y	N		3,158	2009	2.00%	3,221	3,418	3,556	0.098
3549130	44	44	44	C-476 W	CR 625	CR 616	2U		Y	N		3,158	2009	2.00%	3,221	3,418	3,556	0.098
3549140	45	45	45	C-476 W	CR 616	SR 93/I-75	2U		Y	N		3,158	2009	2.00%	3,696	3,923	4,081	0.098
3549150	45	45	45	C-476 W	SR 93/I-75	US 301/SR 35	2U		Y	N		4,091	2009	2.00%	4,173	4,428	4,607	0.098
3549160	46	46	46	C-476/C-48	US 301/SR 35	C-48	2U		Y	N		4,091	2009	2.00%	4,173	4,428	4,607	0.097
3538000	47	47	47	C-476B	SR 93/I-75	C-476 W	2U		N	N		2,095	2009	2.00%	1,940	2,059	2,142	0.098
3535100	48	48	48	C-478 E	US 301/SR 35	CR 747	2U		N	N		1,668	2009	2.00%	1,701	1,805	1,878	0.098
3535110	48	48	48	C-478 E	CR 747	SR 471	2U		N	N		1,716	2009	2.00%	1,750	1,857	1,932	0.098
3534100	49	49	49	C-478 E	SR 471	CR 707	2U		N	N		1,401	2009	2.00%	1,429	1,516	1,578	0.098
3534110	50	50	50	C-478 E	CR 707	C-48 E	2U		N	N		953	2009	2.00%	972	1,032	1,073	0.098
3529000	51	51	51	C-478A	SR 50	SR 471	2U		N	N		681	2009	2.00%	608	645	671	0.098
3553160	56	56	56	C-48	C-476 W	CR 557	2U		Y	N		5,155	2009	2.00%	5,258	5,580	5,805	0.097
3553170	56	56	56	C-48	CR 557	CR 747	2U		Y	N		5,155	2009	2.00%	5,258	5,580	5,805	0.097
3553180	57	57	57	C-48	CR 747	SR 471	2U		Y	N		4,568	2009	2.00%	4,659	4,945	5,144	0.097
3555100	52	52	52	C-48	CITRUS COUNTY BOUNDARY	C-575	2U		Y	N		3,617	2009	2.00%	3,689	3,915	4,073	0.098
3553190	57	57	57	C-48	SR 471	CR 567	2U		N	N		4,568	2009	2.00%	3,679	3,904	4,062	0.097
3555110	52	52	52	C-48	C-575	CR 625	2U		Y	N		3,617	2009	0.72%	3,643	3,722	3,776	0.098
3553200	58	58	58	C-48	CR 567	CR 569	2U		N	N		2,646	2009	2.00%	3,679	3,904	4,062	0.097
3555120	53	53	53	C-48	CR 625	CR 616	2U		Y	N		4,382	2009	2.00%	4,470	4,743	4,935	0.097
3553210	58	58	58	C-48	CR 569	C-478	2U		N	N		4,568	2009	2.00%	3,679	3,904	4,062	0.097
3555130	54	54	54	C-48	CR 616	CR 313	4D		Y	N		8,041	2009	2.00%	8,202	8,704	9,055	0.097
3553100	58	58	58	C-48	C-478	MAGNOLIA AVE	2U		N	N		2,646	2009	2.00%	2,699	2,864	2,980	0.097

	Segment Peak Hour Two Way Volumes			Net New External Project Traffic	Total External Project Traffic	Facility Level of Service (LOS)		Facility Maximum Service Volume (MSV) Peak Hour Two Way			Conceptual Analysis Required (V:MSV > 90%) Base Traffic + 3 or 5 Year Growth + Project Traffic									Within Radius of Influence	On Study Network	Trips Added as Percent of MSV	% Distribution
Segment ID	2010	2013	2015			LOS Method	LOS Standard	MSV (2010)	MSV (2013)	MSV (2015)	2010 Volume Total	2010 V/MSV Ratio	2010 Status	2013 Volume Total	2013 V/MSV Ratio	2013 Status	2015 Volume Total	2015 V/MSV Ratio	2015 Status				
A	S	T	U	W1	W2	X	Y	Z	AA	AB	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AP	AQ	AR	AS
5000620	0	0	0			GEN. TABLES	D	2,060	2,060	2,060	0	0.000	OK	0	0.000	OK	0	0.000	OK	N	N	0.00%	
5000610	0	0	0			GEN. TABLES	D	2,060	2,060	2,060	0	0.000	OK	0	0.000	OK	0	0.000	OK	N	N	0.00%	
5000600	0	0	0			GEN. TABLES	D	2,060	2,060	2,060	0	0.000	OK	0	0.000	OK	0	0.000	OK	N	N	0.00%	
6000025	325	345	359			GEN. TABLES	D	1,482	1,482	1,482	325	0.219	OK	345	0.233	OK	359	0.242	OK	N	N	0.00%	
6000030	824	874	910			GEN. TABLES	D	1,556	1,556	1,556	824	0.53	OK	874	0.562	OK	910	0.585	OK	N	N	0.00%	
6000035	808	857	892			GEN. TABLES	D	1,556	1,556	1,556	808	0.519	OK	857	0.551	OK	892	0.573	OK	N	N	0.00%	
6000040	792	841	875			GEN. TABLES	D	1,556	1,556	1,556	792	0.509	OK	841	0.54	OK	875	0.562	OK	N	N	0.00%	
6000050	249	280	303			GEN. TABLES	D	1,482	1,482	1,482	249	0.168	OK	280	0.189	OK	303	0.204	OK	N	N	0.00%	
6000045	271	305	330			GEN. TABLES	D	1,482	1,482	1,482	271	0.183	OK	305	0.206	OK	330	0.223	OK	N	N	0.00%	
6000015	0	0	0			GEN. TABLES	D	0	4,060	4,060	0	0.000	OK	0	0.000	OK	0	0.000	OK	N	N	0.00%	
6000010	0	0	0			GEN. TABLES	D	0	5,420	5,420	0	0.000	OK	0	0.000	OK	0	0.000	OK	N	N	0.00%	
6000005.1	561	631	682			GEN. TABLES	D	3,220	3,220	3,220	561	0.174	OK	631	0.196	OK	682	0.212	OK	N	N	0.00%	
6000005.3	384	432	468			GEN. TABLES	D	3,220	3,220	3,220	384	0.119	OK	432	0.134	OK	468	0.145	OK	N	N	0.00%	
6000005.2	735	827	894			GEN. TABLES	D	3,220	3,220	3,220	735	0.228	OK	827	0.257	OK	894	0.278	OK	N	N	0.00%	
6000005.4	1,188	1,337	1,446			GEN. TABLES	D	3,220	3,220	3,220	1,188	0.369	OK	1,337	0.415	OK	1,446	0.449	OK	N	N	0.00%	
6000005.6	1,386	1,560	1,687			GEN. TABLES	D	3,220	3,220	3,220	1,386	0.43	OK	1,560	0.484	OK	1,687	0.524	OK	N	N	0.00%	
3300000.1	1,436	1,615	1,747			GEN. TABLES	D	3,220	3,220	3,220	1,436	0.446	OK	1,615	0.502	OK	1,747	0.543	OK	N	N	0.00%	
3300000.2	1,505	1,597	1,661			GEN. TABLES	D	3,220	3,220	3,220	1,505	0.467	OK	1,597	0.496	OK	1,661	0.516	OK	N	N	0.00%	
5000010.1	1,520	1,613	1,678			GEN. TABLES	D	3,126	3,126	3,126	1,520	0.486	OK	1,613	0.516	OK	1,678	0.537	OK	N	N	0.00%	
5000010.2	1,520	1,613	1,678			GEN. TABLES	D	3,126	3,126	3,126	1,520	0.486	OK	1,613	0.516	OK	1,678	0.537	OK	N	N	0.00%	
5000000	1,488	1,579	1,642			GEN. TABLES	D	3,126	3,126	3,126	1,488	0.476	OK	1,579	0.505	OK	1,642	0.525	OK	N	N	0.00%	
5000110	0	0	0			GEN. TABLES	D	1,387	1,387	1,387	0	0.000	OK	0	0.000	OK	0	0.000	OK	N	N	0.00%	
3528100	87	93	97			GEN. TABLES	D	2,040	2,040	2,040	87	0.043	OK	93	0.046	OK	97	0.048	OK	N	N	0.00%	
3528110.1	87	93	97			GEN. TABLES	D	2,040	2,040	2,040	87	0.043	OK	93	0.046	OK	97	0.048	OK	N	N	0.00%	
3528110.2	87	93	97			GEN. TABLES	D	2,040	2,040	2,040	87	0.043	OK	93	0.046	OK	97	0.048	OK	N	N	0.00%	
3528120	269	286	297			GEN. TABLES	D	1,416	1,416	1,416	269	0.19	OK	286	0.202	OK	297	0.21	OK	N	N	0.00%	
3528130.1	291	309	322			GEN. TABLES	D	2,040	2,040	2,040	291	0.143	OK	309	0.151	OK	322	0.158	OK	N	N	0.00%	
3528130.2	291	309	322			GEN. TABLES	D	2,040	2,040	2,040	291	0.143	OK	309	0.151	OK	322	0.158	OK	N	N	0.00%	
3542100	62	73	82			GEN. TABLES	C	1,480	1,480	1,480	62	0.042	OK	73	0.049	OK	82	0.055	OK	N	N	0.00%	
3542120	225	247	264			GEN. TABLES	C	1,440	1,440	1,440	225	0.156	OK	247	0.172	OK	264	0.183	OK	N	N	0.00%	
3542130	225	247	264			GEN. TABLES	C	1,440	1,440	1,440	225	0.156	OK	247	0.172	OK	264	0.183	OK	N	N	0.00%	
3542140	225	247	264			GEN. TABLES	C	1,440	1,440	1,440	225	0.156	OK	247	0.172	OK	264	0.183	OK	N	N	0.00%	
3542150	252	267	278			GEN. TABLES	D	2,040	2,040	2,040	252	0.124	OK	267	0.131	OK	278	0.136	OK	N	N	0.00%	
3541110	472	501	521			GEN. TABLES	D	1,416	1,416	1,416	472	0.333	OK	501	0.354	OK	521	0.368	OK	N	N	0.00%	
3541100	421	447	465			GEN. TABLES	D	1,416	1,416	1,416	421	0.297	OK	447	0.316	OK	465	0.328	OK	N	N	0.00%	
3537100	422	450	469			GEN. TABLES	C	1,480	1,480	1,480	422	0.285	OK	450	0.304	OK	469	0.317	OK	N	N	0.00%	
3537105	464	507	538			GEN. TABLES	C	1,480	1,480	1,480	464	0.314	OK	507	0.343	OK	538	0.364	OK	N	N	0.00%	
3537110	509	580	633			GEN. TABLES	C	1,480	1,480	1,480	509	0.344	OK	580	0.392	OK	633	0.428	OK	N	N	0.00%	
3537115	507	571	618			GEN. TABLES	C	1,480	1,480	1,480	507	0.343	OK	571	0.386	OK	618	0.418	OK	N	N	0.00%	
3537200	600	685	749			GEN. TABLES	C	1,197	1,197	1,197	600	0.501	OK	685	0.572	OK	749	0.626	OK	N	N	0.00%	
3537130	600	685	749			GEN. TABLES	D	1,416	1,416	1,416	600	0.424	OK	685	0.484	OK	749	0.529	OK	N	N	0.00%	
3537140	1,340	1,507	1,630			GEN. TABLES	D	3,220	3,220	3,220	1,340	0.416	OK	1,507	0.468	OK	1,630	0.506	STUDY 2	N	N	0.00%	
3537150	1,481	1,666	1,802			GEN. TABLES	D	3,220	3,220	3,220	1,481	0.46	OK	1,666	0.517	OK	1,802	0.56	STUDY 2	N	N	0.00%	
3537180	2,427	2,701	2,900			GEN. TABLES	D	3,220	3,220	3,220	2,427	0.754	OK	2,701	0.839	OK	2,900	0.901	STUDY 2	N	N	0.00%	
3537190	2,427	2,701	2,900			GEN. TABLES	D	3,220	3,220	3,220	2,427	0.754	OK	2,701	0.839	OK	2,900	0.901	STUDY 2	N	N	0.00%	
3537160.1	1,655	1,914	2,108			GEN. TABLES	D	3,220	3,220	3,220	1,655	0.514	OK	1,914	0.594	OK	2,108	0.655	OK	N	N	0.00%	
3537160.2	1,601	1,882	2,096			GEN. TABLES	D	3,220	3,220	3,220	1,601	0.497	OK	1,882	0.584	OK	2,096	0.651	OK	N	N	0.00%	
3537170	1,635	1,726	1,789			GEN. TABLES	D	3,220	3,220	3,220	1,635	0.508	OK	1,726	0.536	OK	1,789	0.556	OK	N	N	0.00%	
3533100	731	776	807			GEN. TABLES	D	1,416	1,416	1,416	731	0.516	OK	776	0.548	OK	807	0.57	OK	N	N	0.00%	
3533110.1	718	762	792			GEN. TABLES	D	2,040	5,420	5,420	718	0.352	OK	762	0.141	OK	792	0.146	OK	N	N	0.00%	
3533110.2	697	719	733			GEN. TABLES	D	5,420	5,420	5,420	697	0.129	OK	719	0.133	OK	733	0.135	OK	N	N	0.00%	
3533110.5	687	707	722			GEN. TABLES	D	5,420	5,420	5,420	687	0.127	OK	707	0.13	OK	722	0.133	OK	N	N	0.00%	
3533110.4	868	921	958			GEN. TABLES	D	5,420	5,420	5,420	868	0.16	OK	921	0.17	OK	958	0.177	OK	N	N	0.00%	
3557110	280	297	309			GEN. TABLES	D	2,040	2,040	2,040	280	0.137	OK	297	0.146	OK	309	0.151	OK	N	N	0.00%	
3557120	280	297	309			GEN. TABLES	D	2,040	2,040	2,040	280	0.137	OK	297	0.146	OK	309	0.151	OK	N	N	0.00%	
3557130.2	241	256	266			GEN. TABLES	D	2,040	2,040	2,040	241	0.118	OK	256	0.125	OK	266	0.13	OK	N	N	0.00%	
3557130.3	281	298	310			GEN. TABLES	D	2,040	2,040	2,040	281	0.138	OK	298	0.146	OK	310	0.152	OK	N	N	0.00%	
3557140	361	383	399			GEN. TABLES	D	2,030	2,030	2,030	361	0.178	OK	383	0.189	OK	399	0.197	OK	N	N	0.00%	
3553150	194	206	214			GEN. TABLES	C	1,480	1,480	1,480	194	0.131	OK	206	0.139	OK	214	0.145	OK	N	N	0.00%	
3553140	194	206	214			GEN. TABLES	D	2,030	2,030	2,030	194	0.096	OK	206	0.101	OK	214	0.105	OK	N	N	0.00%	
3553110	194	206	214			GEN. TABLES	D	2,030	2,030	2,030	194	0.096	OK	206	0.101	OK	214	0.105	OK	N	N	0.00%	
3550120	682	724	753			GEN. TABLES	D	1,282	1,282	1,282	682	0.532	OK	724	0.565	OK	753	0.587	OK	N	N	0.00%	
3550110	576	612	636			GEN. TABLES	D	1,282	1,282	1,282	576	0.449	OK	612	0.477	OK	636	0.496	OK	N	N	0.00%	
3527000.1	542	575	599			GEN. TABLES	D	1,416	1,416	1,416	542	0.383	OK	575	0.406	OK	599	0.423	OK	N	N	0.00%	
3527000.2	563	598	622			GEN. TABLES	C	1,480	2,030	2,030	563	0.38	OK	598	0.295	OK	622	0.306	OK	N	N	0.00%	
3526000	452	521	573			GEN. TABLES	D	2,030	2,030	2,030	452	0.223	OK	521	0.257	OK	573	0.282	OK	N	N	0.00%	
3530000	545	628	690			GEN. TABLES	D	2,030	2,030	2,030	545	0.268	OK	628	0.309	OK	690	0.34	OK	N	N	0.00%	
3550100	730	775	806			GEN. TABLES	D	2,030	2,030	2,030	730	0.36	OK	775	0.382	OK	806	0.397	OK	N	N	0.00%	
3543100	268	291	307			GEN. TABLES	D	2,040	2,040	2,040	268	0.131	OK	291	0.143	OK	307	0.15	OK	N	N	0.00%	
3543110.1	399	508	596			GEN. TABLES	D	2,040	2,040	2,040	399	0.196	OK	508	0.249	OK	596	0.292	OK	N	N	0.00%	
3543110.2	374	391	403			GEN. TABLES	D	2,040	2,040	2,040	374	0.183	OK	391	0.192	OK	403	0.198	OK	N	N	0.00%	
3531000.1	1,014	1,076	1,119			GEN. TABLES	D	4,883	4,883	4,883	1,014	0.208	OK	1,076	0.22	OK	1,119	0.229	OK	N	N	0.00%	
3531000.2	417	442	460			GEN. TABLES	D	1,340	1,340	1,340	417	0.311	OK	442	0.33	OK	460	0.343	OK	N	N	0.00%	
3525100	210	224	234			GEN. TABLES	C	770	770	770	210	0.273	OK	224	0.291	OK	234	0.304	OK	N	N	0.00%	
3525110	210	224	234			GEN. TABLES	C	770	770	770	210	0.273	OK	224	0.291	OK	234	0.304	OK	N	N	0.00%	
3536100	245	273	294			GEN. TABLES	C	770	770	770	245	0.318	OK	273	0.355	OK	294	0.382	OK	N	N	0.00%	
3537120	428	493	541			GEN. TABLES	D	2,030	2,030	2,030	428	0.211	OK	493	0.243	OK	541	0.267	OK	N	N	0.00%	
3540100	142	151	157			GEN. TABLES	D	2,030	2,030	2,030	142	0.07	OK	151	0.074	OK	157	0.077	OK	N	N	0.00%	
3540110	142	151	157			GEN. TABLES	D	2,030	2,030	2,030	142	0.07	OK	151	0.074	OK	157	0.077	OK	N	N	0.00%	
3549100	306	325	338			GEN. TABLES	C	770	770	770	306	0.397	OK	325	0.422	OK	338	0.439	OK	N	N	0.00%	
3549110	332	352	367			GEN. TABLES	C	770	770	770	332	0.431	OK	352	0.457	OK	367	0.477	OK	N	N	0.00%	
3549120	316	335	348			GEN. TABLES	C	770	770	770	316	0.41	OK	335	0.435	OK	348	0.452	OK	N	N	0.00%	
3549130	316	335	348			GEN. TABLES	C	770	770	770	316	0.41	OK	335	0.435	OK	348	0.452	OK	N	N	0.00%	
3549140	362	384	400			GEN. TABLES	D	1,340	1,340	1,340	362	0.27	OK	384	0.287	OK	400	0.299	OK	N	N	0.00%	
3549150	409	434	451			GEN. TABLES	D	1,340	1,340	1,340	409	0.305	OK	434	0.324	OK	451	0.337	OK	N	N	0.00%	
3549160	405	430	447			GEN. TABLES	D	1,282	1,282	1,282	405	0.316	OK	430	0.335	OK	447	0.349	OK	N	N	0.00%	
3538000	190	202	210			GEN. TABLES	C	770	770	770	190	0.247	OK	202	0.262	OK	210	0.273	OK	N	N	0.00%	
3535100	167	177	184			GEN. TABLES	D	1,340	1,340	1,340	167	0.125	OK	177	0.132	OK	184	0.137	OK	N	N	0.00%	
3535110	172	182	189			GEN. TABLES	D	1,340	1,340	1,340	172	0.128	OK	182	0.136	OK	189	0.141	OK	N	N	0.00%	
3534100	140	149	155			GEN. TABLES	D	1,340	1,340	1,340	140	0.104	OK	149	0.111	OK	155	0.116	OK	N	N	0.00%	
3534110	95	101	105			GEN. TABLES	D	1,340	1,340	1,340	95	0.071	OK	101	0.075	OK	105	0.078	OK	N	N	0.00%	
3529000	60	63	66			GEN. TABLES	D	1,340	1,340	1,340	60	0.045	OK	63	0.047	OK	66	0.049	OK	N	N	0.00%	
3553160	510	541	563			GEN. TABLES	D	2,030	2,030	2,030	510	0.251	OK	541	0.267	OK	563	0.277	OK	N	N	0.00%	
3553170	510	541	563			GEN. TABLES	D	2,030	2,030	2,030	510	0.251	OK	541	0.267	OK	563	0.277	OK	N	N	0.00%	
3553180	452	480	499			GEN. TABLES	C	1,016	1,016	1,016	452	0.445	OK	480	0.472	OK	499	0.491	OK	N	N	0.00%	
3555100	362	384	399			GEN. TABLES	C	770	770	770	362	0.47	OK	384	0.499	OK	399	0.518	OK	N	N	0.00%	
3553190	357	379	394			GEN. TABLES	C	1,016	1,016	1,016	357	0.351	OK	379	0.373	OK	394	0.388	OK	N	N	0.00%	
3555110	357	365	370			GEN. TABLES	C	770	770	770	357	0.464	OK	365	0.474	OK	370	0.481	OK	N	N	0.00%	
3553200	357	379	394			GEN. TABLES	D	2,030	2,030	2,030	357	0.176	OK	379	0.187	OK	394	0.194	OK	N	N	0.00%	
3555120	434	460	479			GEN. TABLES	C	1,480	1,480	1,480	434	0.293	OK	460	0.311	OK	479	0.324	OK	N	N	0.00%	
3553210	357	379	394			GEN. TABLES	D	2,030	2,030	2,030	357	0.176	OK	379	0.187	OK	394	0.194	OK	N	N	0.00%	
3555130	796	844	878			GEN. TABLES	D	2,708	2,708	2,708	796	0.294	OK	844	0.312	OK	878	0.324	OK	N	N	0.00%	
3553100	262	278	289			GEN. TABLES	D	2,030	2,030	2,030	262	0.129	OK	278	0.137	OK	289	0.142	OK	N	N	0.00%	

Tindale-Oliver and Associates, Inc.
2/8/2010
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APPENDIX B

Intersection Turning Movement Count Worksheets

and

Existing HCS Worksheets

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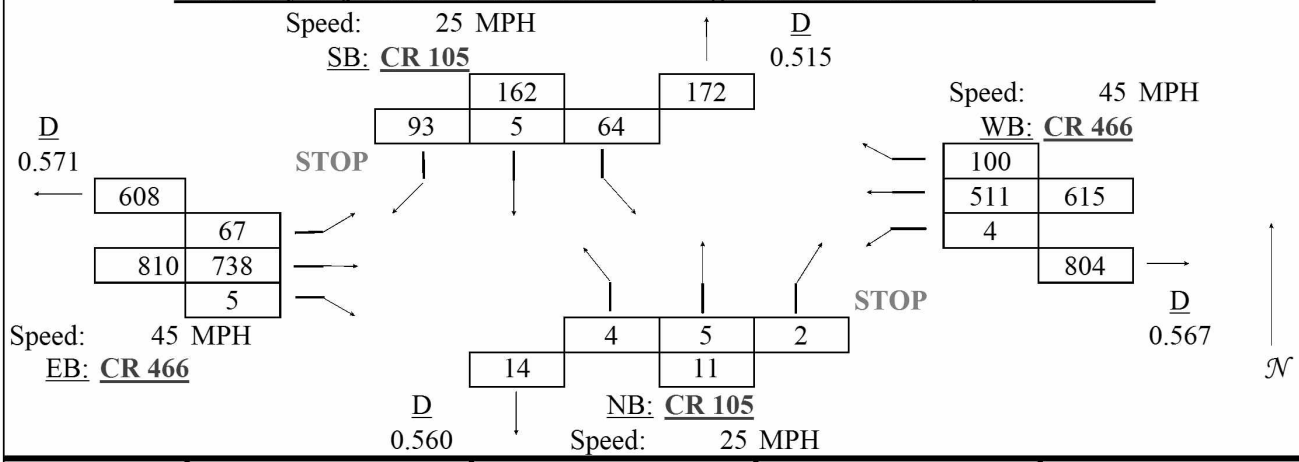
Summary of Vehicle Movements

Luke Transportation Engineering Consultants

Project:	**Murphy Oil**		**LTEC 10-1001**		
N/S Road:	**CR 105**	Observer:	GE		
E/W Road:	**CR 466**	Weather:	Clear		
Date:	Tuesday, March 23, 2010	Rd Condition:	Dry		
City:	Oxford	Signal:	No	Township:	0
County:	Sumter	Stop Control	E/W	Range:	0
FDOT SF:	0.91	Pk Hr Factor:	0.96	Section:	0

Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 4:45 - 5:45



P.M. Peak Hour	CR 105 Northbound			CR 105 Southbound			CR 466 Eastbound			CR 466 Westbound		
Time Interval	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt
# Lanes	>	1	<	>	1	1	1	2	<	1	2	1
4:00 4:15	1	1	1	13	1	29	12	181	1	0	108	28
4:15 4:30	1	1	1	18	1	27	22	210	1	1	139	31
4:30 4:45	1	1	0	18	1	25	14	180	2	1	112	23
4:45 5:00	1	1	0	15	1	25	18	208	1	1	140	27
Hourly Sum	4	4	2	64	4	106	66	779	5	3	499	109
5:00 5:15	1	1	0	16	1	23	19	197	1	1	127	29
5:15 5:30	1	1	1	19	1	28	17	210	2	1	148	27
5:30 5:45	1	2	1	20	2	26	20	196	1	1	146	27
5:45 6:00	1	1	0	15	1	22	16	173	1	1	139	31
Hourly Sum	4	5	2	70	5	99	72	776	5	4	560	114
Peak Hour												
4:45 5:45	4	5	2	70	5	102	74	811	5	4	561	110
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor												
4:45 5:45	**4**	**5**	**2**	**64**	**5**	**93**	**67**	**738**	**5**	**4**	**511**	**100**
Peak 15	**1**	**2**	**1**	**18**	**2**	**25**	**18**	**191**	**2**	**1**	**135**	**26**
% Turns	36.4%	45.5%	18.2%	39.5%	3.1%	57.4%	8.3%	91.1%	0.6%	0.7%	83.1%	16.3%
Appr Total	11			162			810			615		
Appr %	0.7%			10.1%			50.7%			38.5%		
Away Total	172			14			804			608		
Away % Turns	39.0%	2.9%	58.1%	28.6%	35.7%	35.7%	8.0%	91.8%	0.2%	0.7%	84.0%	15.3%
Pk Hr Factor	1.00	0.63	0.50	0.89	0.63	0.93	0.93	0.97	0.63	1.00	0.95	0.96
Approach	0.67			0.92			0.97			0.96		

HCS+: Unsignalized Intersections Release 5.4

TWO-WAY STOP CONTROL SUMMARY

Analyst:	JTR
Agency/Co.:	LTEC
Date Performed:	4/15/2010
Analysis Time Period:	PM Peak Hour
Intersection:	CR 466 & CR 103
Jurisdiction:	Sumter
Units: U. S. Customary	
Analysis Year:	2010
Project ID: Existing	
East/West Street:	CR 466
North/South Street:	CR 103
Intersection Orientation: EW	Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	67	738	5	4	511	100
Peak-Hour Factor, PHF	0.93	0.97	0.63	1.00	0.95	0.96
Hourly Flow Rate, HFR	72	760	7	4	537	104
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type/Storage	TWLTL			/ 4		
RT Channelized?						No
Lanes	1	2	0	1	2	1
Configuration	L	T	TR	L	T	R
Upstream Signal?		No			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	4	5	2	64	5	93
Peak Hour Factor, PHF	1.00	0.63	0.50	0.89	0.63	0.93
Hourly Flow Rate, HFR	4	7	4	71	7	99
Percent Heavy Vehicles	2	2	2	2	2	2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage		No	/			/
Lanes	1	1	0	0	1	1
Configuration	L		TR	LT		R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L	L	L		TR	LT		R
v (vph)	72	4	4		11	78		99
C(m) (vph)	939	842	264		149	326		769
v/c	0.08	0.00	0.02		0.07	0.24		0.13
95% queue length	0.25	0.01	0.05		0.24	0.92		0.44
Control Delay	9.2	9.3	18.8		31.1	19.5		10.4
LOS	A	A	C		D	C		B
Approach Delay			27.8			14.4		
Approach LOS			D			B		

APPENDIX C

2011 HCS Worksheets

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HCS+: Unsignalized Intersections Release 5.4

TWO-WAY STOP CONTROL SUMMARY

Analyst: JTR
Agency/Co.: LTEC
Date Performed: 4/15/2010
Analysis Time Period: PM Peak Hour
Intersection: CR 466 & CR 103
Jurisdiction: Sumter
Units: U. S. Customary
Analysis Year: 2010
Project ID: Projected with Total Traffic
East/West Street:
North/South Street: CR 103
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	70	826	47	4	595	104
Peak-Hour Factor, PHF	0.93	0.95	0.95	1.00	0.95	0.96
Hourly Flow Rate, HFR	75	869	49	4	626	108
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type/Storage	TWLTL			/ 4		
RT Channelized?						No
Lanes	1	2	0	1	2	1
Configuration	L	T	TR	L	T	R
Upstream Signal?		No			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	51	9	7	67	10	97
Peak Hour Factor, PHF	0.95	0.90	0.95	0.89	0.90	0.93
Hourly Flow Rate, HFR	53	10	7	75	11	104
Percent Heavy Vehicles	2	2	2	2	2	2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage		No	/			/
Lanes	1	1	0	0	1	1
Configuration	L		TR	LT		R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L	L	L		TR	LT		R
v (vph)	75	4	53		17	86		104
C(m) (vph)	867	739	217		116	245		726
v/c	0.09	0.01	0.24		0.15	0.35		0.14
95% queue length	0.28	0.02	0.93		0.50	1.51		0.50
Control Delay	9.5	9.9	26.9		41.3	27.4		10.8
LOS	A	A	D		E	D		B
Approach Delay				30.4			18.3	
Approach LOS				D			C	

HCS+: Unsignalized Intersections Release 5.4

TWO-WAY STOP CONTROL SUMMARY

Analyst: JTR
Agency/Co.: LTEC
Date Performed: 4/15/2010
Analysis Time Period: PM Peak Hour
Intersection: CR 105 & Murphy Oil Ent B
Jurisdiction: Sumter
Units: U. S. Customary
Analysis Year: 2010
Project ID: Projected with Total Traffic
East/West Street: Murphy Oil Entrance A
North/South Street: CR 105
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		11	2	46	15	
Peak-Hour Factor, PHF		0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR		11	2	48	15	
Percent Heavy Vehicles		--	--	2	--	--
Median Type/Storage	Undivided		/			
RT Channelized?						
Lanes		1	0	0	1	
Configuration			TR		LT	
Upstream Signal?		No			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	2		56			
Peak Hour Factor, PHF	0.95		0.95			
Hourly Flow Rate, HFR	2		58			
Percent Heavy Vehicles	2		2			
Percent Grade (%)	0			0		
Flared Approach: Exists?/Storage			No /			/
Lanes	0		0			
Configuration	LR					

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LR				
v (vph)		48		60				
C(m) (vph)		1606		1060				
v/c		0.03		0.06				
95% queue length		0.09		0.18				
Control Delay		7.3		8.6				
LOS		A		A				
Approach Delay				8.6				
Approach LOS				A				

HCS+: Unsignalized Intersections Release 5.4

TWO-WAY STOP CONTROL SUMMARY

Analyst: JTR
Agency/Co.: LTEC
Date Performed: 4/15/2010
Analysis Time Period: PM Peak Hour
Intersection: CR 466 & Murphy Oil Ent B
Jurisdiction: Sumter
Units: U. S. Customary
Analysis Year: 2010
Project ID: Projected with Total Traffic
East/West Street: CR 466
North/South Street:
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		865	35	59	689	
Peak-Hour Factor, PHF		0.93	0.95	1.00	0.95	
Hourly Flow Rate, HFR		930	36	59	725	
Percent Heavy Vehicles		--	--	2	--	--
Median Type/Storage	TWLTL			/ 1		
RT Channelized?						
Lanes		2	0	1	2	
Configuration		T	TR	L	T	
Upstream Signal?		No			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	14		65			
Peak Hour Factor, PHF	0.95		0.90			
Hourly Flow Rate, HFR	14		72			
Percent Heavy Vehicles	2		2			
Percent Grade (%)	0			0		
Flared Approach: Exists?/Storage			No /			/
Lanes	0		0			
Configuration	LR					

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		L		LR				
v (vph)		59		86				
C(m) (vph)		709		471				
v/c		0.08		0.18				
95% queue length		0.27		0.66				
Control Delay		10.5		14.3				
LOS		B		B				
Approach Delay				14.3				
Approach LOS				B				